BY ORDER OF THE COMMANDER
AEROSPACE MAINTENANCE AND
REGENERATION CENTER

AMARC INSTRUCTION 21-109

7 October 1997

Maintenance

ENGINE STATUS SYSTEM

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction implements Air Force Policy Directive (AFPD) 21-1, Managing Aerospace Equipment Maintenance and establishes policies, procedures, and instructions used by the Aerospace Maintenance and Regeneration Center (AMARC) in the maintenance and control of the Engine Status System. The Engine Status System, D003AF82 interfaces with the Aircraft Status System, D003AF76 (AMARCI 21-131) to permit updating of aircraft records when engines are installed or obligated to aircraft. Internal computer records will contain a cross-reference of engines assigned to aircraft until the aircraft departs AMARC. This instruction applies to the Aircraft Management (LA), Logistics (LG), Comptroller (FM), and Plans and Programs (XP) Directorates.

SUMMARY OF CHANGES: Clarifies engine identification (ID) numbers; clarifies prefix designator codes which are synonymous with Engine Type Code.

1. GENERAL. This system provides status for all engines physically located at AMARC. Engine status provides inventory visibility, current engine reporting status, and AMARC aircraft status (for installed or obligated engines) at any given time. AMARC engine status and aircraft status are the same for obligated engines. It also provides location data of all engines, operating hours since overhaul, owning service, and project assignment.

2. RESPONSIBILITIES.

2.1. The AMARC Engine Manager (EM) will:

2.1.1. Serve as point of contact for all matters concerning the operation of the AMARC engine status system.

2.1.2. Perform the engine management functions cited in TO 00-25-254-1, AMARCI 21-100, *The Processing of AMARC Accountable Assets,* Chapter 4, and NAVAL AIR INSTRUCTION (NAVAIRINST) 13700.15B.

2.1.3. Coordinate with the Depot Maintenance Activity Group (DMAG) Management Division (FMB), and Workload Division (FMW), Aircraft Status function when discrepancies are found between the Aircraft Status System and the Engine Status System.

2.1.4. Assign engine ID numbers upon receipt of engines at AMARC.

2.1.5. Assign unobligated engines to engine reclamation projects upon notification from FMW.

2.1.6. Provide the Reclamation Division (LAR) a list of engines selected for engine reclamation projects.

2.1.7. Monitor the F82 Part III Unobligated Engine Listing received monthly for any duplicate or location errors, and make necessary corrections (XIS input) to the AMARC main frame system (attachment 4).

2.2. FMW is responsible for acceptance of all engine reclamation projects and preparation of Work Authorization Documents (WAD). AMARC Form 71, Work Order Request, will be prepared by the EM (AMARCI 21-100, Chapter 4).

2.3. Reclamation Support Branch (LARS), Scheduling will ensure AMARC Form 20, Engine Removal Request, for installation or removal of engines (other than reclamation), specify the work-load requirements.

2.4. The Process Out Division (LAO), Special Support Division (LAS), Propulsion Branch (LASE), and LAR will prepare an AF Form 1534, CEMS Central Data Bank (CDB) Report and/or via E-mail, notify the EM for reporting actions. (NOTE: Reclamation procedures for engine removal are in AMARCI 21-100, Chapter 4).

2.5. The Aircraft Disposition Office (LG-2) will forward a copy of the transfer document to the EM when aircraft are transferred or donated to other activities.

3. PROCEDURES.

3.1. Preparation of Engine Status Inputs. Engine status inputs are required for all engines in the possession of AMARC (see attachments 2 and 11). The AMARC Engine Status System includes all data elements required by TO 00-25-254-1 for Air Force Engines and NAVAIRINST 13700.15B for Navy engines. Since command reporting procedures have not been established for reporting Army and Coast Guard engines, Army engines will be loaded by Air Force procedures and Coast Guard engines by Navy procedures.

3.2. New Aircraft Arrivals.

3.2.1. FMW will assign project and status.

3.2.2. The FMW, Aircraft Status function will assign an AMARC ID number to aircraft arriving at AMARC, and load into the Aircraft Status System. The input accepted notice will be forwarded to the EM to provide the necessary aircraft data needed to process engines into the AMARC system.

3.3. Engines Maintained by AMARC. All engines will be loaded in the Engine Status System (attachment 1). Upon notification of aircraft and engine records the EM will:

3.3.1. Process XAT inputs to establish engine prefix designator codes, if the engine type is not in the AMARC AMARC main frame system (attachment 3).

3.3.2. Assign AMARC ID number for each engine received.

3.3.3. Prepare AF Form 1534 for each Air Force engine or an AMARC Form 112, Navy Engine Manager's Work Sheet, for Navy engines.

3.3.4. Process XPE inputs to load all engines installed or obligated to an aircraft (attachment 4).

3.3.5. Process XIS inputs to load, change, or delete engine status records (attachment 5). All XIS inputs must be loaded in ID number sequence. Clear any rejects prior to processing the next ID number.

3.3.6. Process XID inputs to load or change indicative data in the engine status record (attachment 6).

3.3.7. Process XIE for additional data in the engine status record (attachment 7).

3.3.8. If unable to process any of the above inputs, contact the Communication Management Division (XPI), Computer Support Branch (XPIC).

3.3.9. Compare output documents with input data source to ensure accuracy.

3.3.10. If an adjustment to the asset visibility is required, notify the Management Support Office (LAA) to input an XREV in accordance with (IAW) AMARCI 21-100.

3.4. Uninstalled Engine Arrivals. Engines may arrive at AMARC to be reinstalled on aircraft in support of fly-away, reclamation, or jet engine intermediate maintenance (JEIM) support for other projects. Engines will be received by the Supply Division (LGS), Storage and Distribution Branch (LGSD). LGSD will ensure there are records for each serviceable "A" engine, remove records and forward to the EM. Check container pressure for 5 lbs and humidity indicator for blue color. Ensure the DD Form 1348-1A, Issue/Turn-in Request, is with the engine. If not, provide a copy of the Government Bill of Lading (GBL), annotate the engine serial number, date and time it was received and forward to EM. Engines other than serviceable condition do not require engine records for pressure check. Engines must have a DD Form 1348-1A, if not, provide a copy of the GBL, annotate each serial number, date and time it was received and forward to EM.

3.4.1. LGSD will place engines in a temporary storage area pending disposition instructions from the EM.

3.4.2. The EM will:

3.4.2.1. Submit an AMARC Form 71 for incoming engines to Process In Division (LAI), Process In Support Branch (LAIA), to schedule movement of engines.

3.4.2.2. Prepare an AF Form 1534 for receipt of Air Force engines or an AMARC Form 112 for Navy engines. Army and Coast Guard engines are processed in the AMARC System only and do not require forms.

3.4.2.3. Assign AMARC engine ID number.

3.4.2.4. Process an XAT, if required.

3.4.2.5. Process an XIS input.

3.4.2.6. Prepare an AMARC Form 71 if the engine is to be reinstalled. Specify engine ID number, aircraft ID number, and other special instructions, i.e., "AF Form 1534 required by the EM on completion of installation." Forward the AMARC Form 71 to the Process Out Sup-

port Branch (LAOA) for scheduling action. Reference the applicable blanket work order or WAD on AMARC Form 71.

3.4.2.7. Notify the Propulsion Branch (LASE) of engine availability if the engine is a spare to support a fly-away project, or JEIM support.

3.4.2.8. For engines received for a reclamation project:

3.4.2.8.1. FMW will process additional XAT to pair the prefix designator code with the reclamation project type code.

3.4.2.8.2. Request FMW prepare or amend the project WAD to include new engines; provide FMW with the engine ID number, and engine serial number.

3.5. Aircraft Departing With Obligated Engines.

3.5.1. Engines installed on departing aircraft will automatically be deleted via aircraft AMARC status flag processed by FMW.

3.5.2. The EM will be notified by FMW of aircraft departing overland that have uninstalled/obligated engines. The EM will deobligate and delete engines from the aircraft cross-reference record and prepare shippers if engines are to go with aircraft.

3.6. Engine Status Changes. Obligated uninstalled/unobligated engines:

3.6.1. The computer will automatically update the data on obligated engines which are common to aircraft when FMW, Aircraft Status function changes locations or projects changes.

3.6.2. The EM will input XIS or XID change data elements peculiar to engines, i.e., reporting status, reporting sequence number, or operating time.

3.6.3. LGSD will place uninstalled engines in location and process location update IAW attachment 5.

3.7. Inventories.

3.7.1. Systems Management (LGSP), Inventory uses the Engine Directory (D003AF823) to document all aircraft engines in engine location sequence with the option to select specific customers (Air Force, Navy, Army, and Coast Guard), and obligated/unobligated and installed/uninstalled engines located at AMARC.

3.7.2. Annually, LGSP and the EM will schedule and perform a physical inventory of all engines not on reclamation projects, checking each engine and aircraft by ID number.

3.8. Aircraft Engine Reclamation.

3.8.1. Dedicated engines will be reclaimed as part of the aircraft reclamation project when complete engines are not required. All parts removal time will be charged to the aircraft production control number (PCN). NOTE: The owning service will pay for unobligated engine reclamation.

3.8.2. Unobligated engines will be reclaimed as end items on engine reclamation projects. Upon receipt of a project WAD, the EM will:

3.8.2.1. Transfer engines to the appropriate project (RSE, NRE, ARE, or CRE), positions 34-41 of the XIS input and place in PC status.

3.8.2.2. When changing the status to "PC," positions 12-17 will be "FJ2373." For Air Force

engines, positions 18-19 will start with "01" and continue in sequence. Positions 20-21 will show the Engine Identifier as outlined in TO 00-25-254-1, Chapter 7. For other services' engines, positions 18-21 will be numbered starting with "0001" and continuing in sequence.

NOTE:

This input will produce a Disposal Turn-In Document (DTID), TRIC *MM, in three copies, output to the Em terminal. The EM will forward the *MM to LG-2.

3.8.2.3. Prepare AF Form 1534 to drop accountability for each engine dedicated to the project, i.e., (1M2191), documented in the Supply Record Account Number (SRAN) Directory, or an AMARC Form 112 for Navy engines.

3.8.2.4. Provide a list of engines to be removed or reclaimed to the LARS, Planners. The list will include engine serial number, location, and AMARC ID number.

3.8.2.5. When notified by LAR to put a particular engine in work, process an XIS and change the status to "PD" (in work). Process AF Form 1534 in the CEMs (see attachment 1) for each engine.

3.8.2.6. Using the master copy AMARC Form 71, process an XIS input to change status to "PA" removals completed) on the last working day of the month. The computer program automatically changes the status to "PJ" (completed, not transferred to the Defense Reutilization and Marketing Office (DRMO)), then to "UH" because all engines are transferred to DRMO as scrap. The engine will no longer appear on the Aircraft Engine Directory (F82).

4. REPORTS AND PRODUCTS. Reports required in the Engine Status System and products necessary to manage engines in the AMARC inventory are as follows:

4.1. Propulsion Unit Operating Time and Reconciliation Report (PCN: CED042. BUA510.A10Q Quarterly, and CED042. 8A510.A20Q Semiannually). This report is extracted from CEMS CDB in two parts and is applicable to Air Force engines only. Part I applies to active units.

4.1.1. Part I is the operating time on in-use reportable engines and is required each calendar quarter. Data is extracted from AF Forms 1534 for each operational engine, and input via CEMS for transmission to CDB, Tinker AFB, Oklahoma (OK).

4.1.2. Part II is the semiannual engine reconciliation due in April and October. This report is obtained from OC-ALC/TILC by AMARC/XPIC. The report is transmitted electronically upon request from the CEMS direct to the AMARC main frame system. The AMARC main frame system compares the two systems and creates an error listing. The EM will take the necessary action to correct the engine records using AF Form 1534 to input corrected data into the CEMS, and the error listing will be used to make corrections in theAMARC main frame system. (The April reconciliation is a coordinated effort with LGSP, Inventory.)

4.2. Reconciliation Reports for Navy, Army, and Coast Guard.

4.2.1. Reconciliation of Navy engines will be accomplished IAW ISA 1997 Edition, Chapter 1, paragraph V, page 1-17, upon receipt of the reconciliation listing from the Naval Inventory Control Point, Detachment Field Service Office (FSO).

4.2.2. No reconciliation requirements have been established for Army or Coast Guard engines.

4.3. Data for Engines Installed on Excess Aircraft (RCS: MTCMM(AR)7759). The EM will request this report by submitting an AF Form 2011, Base Supply Special ADPE Work Request, to XPIC when an aircraft is assigned to a reclamation project, regardless of the owner. Input data and distribution of this report are outlined in attachment 9.

4.3.1. The Excess Engines on Aircraft Report (D003AP25) will be received at the end of each month. The EM will ensure all installed engines transferred to the AFSDPDA account have been reported to the item manager (IM). The IM will provide disposition instructions for the EM to take appropriate action. The EM will transfer the engines from the FJ2373 account to the 1M2191 account in CEMS (attachment 13).

4.3.2. The EM will process status changes in the AMARC main frame system from "00" to "08" to indi-cate excess engines have been dropped from CEMS. Monitor the D003AP25 Report to assure these changes have been made.

4.4. The Engine Status Directory (D003AF82). The Engine Status Directory (D003AF82) provides a ready reference for engines physically maintained by AMARC (attachment 8). Indicative data shown is extracted from engine status records (attachment 10). Each service's engines are shown in a separate part of the directory. A 2-part list is processed weekly and updates made as they occur.

4.4.1. Part I - AMARC ID number sequence within engine type.

4.4.2. Part II - Engine serial number sequence within engine type.

4.4.3. Part III - Unobligated Engine Inventory Listing in engine location sequence received monthly.

NOTE:

A special Part III, documenting all aircraft engines in engine location sequence, may be requested for use during annual inventory, with the option to select specific customers.

4.5. Engine Deletion Report (D003AF766). The Engine Deletion Report (D003AF766) is processed quarterly and is a record of engines previously located at AMARC. It is retained by the EM for any follow-up actions.

4.6. Engine Activity Report (D003AP14). Program D003AP14 is processed monthly. This report is used by the EM to ensure an accurate audit trail of engines and unit cost of each engine is maintained. The EM will provide LGSP with the total dollar value for all engines located at AMARC no later than the third workday of the month (attachment 12).

OFFICIAL

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Chief, Information and Publications Branch

Attachment 1

GLOSSARY OF TERMS

Terms

AFSDPDA—The Air Force Special Defense Property Disposal Account (FR2373 Account).

CEMS—Comprehensive Engine Management System.

DIRECTORY—Refers to the Engine Status Directory.

ENGINE—Includes reportable auxiliary power units (APU), reportable gear boxes, and engine modules.

ENGINE IDENTIFICATION (ID) NUMBER—An AMARC coding system to identify each engine. ID Numbers are eight positions. The first two positions are the commodity and ownership codes; always alpha characters. The next two positions are the Prefix Designator/Engine Type Codes; always an alpha followed by a numeric character IAW AMARCI 21-131, AMARC Aerospace Vehicle Inventory Control and Status System. The last four positions are numeric and are ascending sequence numbers beginning with 0001 through 9999, assigned by the AMARC Engine Manager, i.e., EAB50100, E=Engine, A=Air Force, B5=Prefix Designator for J57 type engines, and 0100=the one hundredth engine of its type proces-sed into AMARC.

OBLIGATED ENGINE—An engine dedicated to a specific aircraft.

UNOBLIGATED ENGINE—An engine received uninstalled or removed from an aircraft.

TRIC—Transaction Identifier Codes. Select input TRICs applicable to engine status system. From TRIC main menu screen, select the screen number applicable to the engine status. Screen 04=XIS, screen 05=XID, screen 06-XIE, screen 16=XAT and screen 17=XPE (attachment 2). XIQs are documented in AMARCI 21-100, Attachment 2.

Attachment 2

AIRCRAFT/ENGINE/BLADES/CEMS UNITS/WORK ORDERS/TYPE CODES/PRS UNITS/ ACFT/ENG XREF RCDS AND ACFT BLDS RCDS (XREF)

This input is for selection of processing function for aircraft, engines, blades, CEM units, work orders, type codes, PRS units, aircraft/engine XREF records and aircraft BLD XREF records.

Select your input screen format, enter screen number and press return key.

NBR	FUNCTION	TRANS I.D.
01	AIRCRAFT	*IS
02	AIRCRAFT	*ID
03	AIRCRAFT	*IE
04	ENGINE	*IS
05	ENGINE	*ID
06	ENGINE	*IE
07	BLADES	*IS
08	BLADES	*ID
09	BLADES	*IE
10	CEM	*IS
11	CEM	*ID
12	PHOTO RECON	*IS
13	PHOTO RECON	*ID
14	WORK ORDER	*IS
15	WORK ORDER	*ID
16	TYPE CODES	*AT
17	ACFT/ENG XREF	*PE
18	ACFT/BLD XREF	*PB

Attachment 3

TYPE CODE RECORD LOAD/DELETE INPUT (XAT)

This input is designed to establish AMARC type code records providing a table of all assigned aircraft engines work orders blades and projects. All type code inputs pertain to the AMARC Aircraft Status System except engine type code inputs which apply to the AMARC Engine Status System. Both systems will be fully interfaced for common application. No transaction histories are generated by XAT inputs.

TYPE CODE RECORDS XAT ON-LINE INPUT FORMAT

TYPE ACTION L = LOAD; D = DELETE

			Remarks
1-3	TRIC	XAT	
4	TYPE ACTION CODE		NOTE 1
5-6	TYPE RECORD CODE	**	
7	BLANK		
8-9	TYPE CODE/BLANK/(USE FOR SAVE LIST)		NOTES 2, 3, & 4
10-11	TYPE CODE/BLANK/(FOR ACFT/ALL OTHERS EXCEPT SVLIST)		NOTES 2, 3, & 4
12-13	BLANK		
14-19	PAIRED TYPE CODES/BLANK		NOTES 4 & 5
20-80	BLANK		

NOTE 1: L = Load D = Delete

NOTE 2: Enter type code to load or delete from the type code record file.

NOTE 3: Aircraft, Engine, and Work Order type codes are constructed according to instructions in AMARCI 21-131. The following special characters are authorized as indicated

a. Programmed Reclamation, $ % .

b. Group I Reclamation, 900 series + / :

NOTE 4: a. All XAT inputs pertaining to aircraft, work order, or project type codes are the function of FMW.

b. XAT inputs assigning engine type codes is the function of the EM.

c. XAT inputs assigning blades type codes is the function of LGLM, Storage.

NOTE 5: To load or delete paired type codes enter aircraft, engine or blade in positions 14-17, position 15 leave blank. Enter project type code in positions 18-19. This action will load into or delete paired type codes from the Aircraf t, Engine/Project Type Code Table.

Attachment 4

AIRCRAFT TO ENGINE CROSS REFERENCE INPUT (XPE) FOR AIRCRAFT TO ENGINE LINKAGE

This input is used to load all engines installed or obligated to an aircraft located or arriving at AMARC. The input will provide a perpetual record of engines installed on an aircraft and the eventual disposition of the engines. Records are retained until the aircraft leaves AMARC. This format will be used by the EM.

AIRCRAFT/ENGINE XREF RCD XPE ONLINE INPUT FORMAT

TYPE ACTION L = LOAD C = CHANGE A = ADD D = DELETE

			Remarks
1- 3	TRIC	XPE	
4	TYPE ACTION CODE		NOTES 1 and 2
5- 6	TYPE RECORD CODE	04	
7-14	COMM CODE/COMM OWNER/ AIRCRAFT TYPE ID NBR		NOTE 3
15	BLANK		
16	CHANGE CODE/BLANK		NOTE 2
17-24	ENGINE TYPE-ID NBR		
25-32	ENGINE TYPE-ID NBR/BLANK		
33-40	ENGINE TYPE-ID NBR/BLANK		
41-48	ENGINE TYPE-ID NBR/BLANK		
49-56	ENGINE TYPE-ID NBR/BLANK		
57-64	ENGINE TYPE-ID NBR/BLANK		
65-72	ENGINE TYPE-ID NBR/BLANK		
73-80	ENGINE TYPE-ID NBR/BLANK		
83	PRINT OUTPUT DOCUMENT/		NOTE 4

NOTE 1: L = LOAD C = CHANGE D = DELETE

NOTE 2: a. To add an engine to the record:

(1) Enter "C" in position 4.

(2) Enter "A" in position 16.

(3) a. Enter engine to be added in positions 17-24. (Engine must be loaded, unobligated, and in TA status.)

b. To replace an existing engine in the record with another engine:

(1) Enter "C" in position 4.

(2) Enter "R" in position 16.

(3) Enter engine to be replaced in positions 17- 24.

(4) Enter replacement engine in positions 25-32. (Engine must be loaded, unobligated, and in TA status.)

c. To delete an engine from the record:

(1) Enter "D" in position 4.

(2) Enter "*" in position 16.

(3) Enter engine to be deleted in positions 17-24.

d. To delete a record enter "D" in position 4.

NOTE 3: Mandatory on all inputs.

NOTE 4: Enter a "P" in position 83 to print output document.

Attachment 5

ENGINE STATUS RECORD INPUT FORMAT (XIS)

This input provides the capability to load or change Engine Status records. Input TRIC (XIS) is also used to process aircraft and work order status records. Internal edits of input data elements will determine type of record to build or change.

ENGINE XIS ON-LINE INPUT FORMAT

TYPE ACTION L = LOAD C = CHANGE D = DELETE

			Remarks
1- 3	TRIC	XIS	L = LOAD, C = CHANGE
4	TYPE ACTION CODE		
5- 6	TYPE RECORD CODE	2	
7-14	COMM CODE/COMM OWNER/		
	ENGINE TYPE ID NBR		NOTE 1
15-26	TYPE/MODEL/SERIES OR BLANK		NOTE 2
27-36	ENGINE SERIAL NBR/BLANK		NOTE 2
37-44	PROJECT NBR/BLANK		NOTE 3
45	OWNERSHIP CODE/BLANK		NOTE 10, A, H, C, or N
46-47	ENGINE STATUS FLAG/BLANK		NOTE 4
48-49	AMARC STATUS CODE/BLANK		NOTE 5
50	ENGINE POSITION (ON ACFT)/BLANK		NOTE 6
51-58	AIRCRAFT TYPE-ID NBR/BLANK		NOTE 7
59-63	RECEIPT/ARRIVAL DATE/BLANK		
64-68	HOURS SINCE LAST OVERHAUL/ BLANK		
69	CUSTOMER CODE/BLANK		NOTE 11, A, H, C or N
70-79	ENGINE LOCATION/BLANK		NOTE 8
80	INDICATOR CODES/BLANK		NOTE 10
81-85	DEPARTURE DATE/BLANK		
86	LOAD SEQ NBR OVERRIDE/BLANK		NOTE 9

NOTE 1: AMARC assigned engine type codes are contained in AMARCI 21-131. Engine identification numbers will be sequentially assigned, beginning with "001" for each type code. A type code will be assigned for each engine type, such as R1820, J0057, etc.

NOTE 2: Engine type, model, series, and serial numbers will be constructed as follows:

a. Air Force - format outlined in TO 00-25-254-1, Chapter 7, and Oklahoma City-Air Logistics Center (OC-ALC) Engine Designation Table.

b. Navy - format outlined in NAVAIR INST 13700.15B.

c. Army - use Air Force format.

d. Coast Guard - use Navy format.

NOTE 3: Installed or obligated engines will contain the aircraft project number. Unobligated engines: Air Force engines - LOG7E999, Navy engines - NSX20000, Army engines - AWE999 and Coast Guard engines - CWE999.

NOTE 4: Status Flag:

a. Column 1 position 46:

0 = obligated to an aircraft, installed.

1 = obligated to an aircraft, not installed.

9 = not obligated to an aircraft.

b. Column 2 position 47:

0 = no flag engine assumed serviceable.

1 = metal in sump, unserviceable.

2 = excessive oil leakage, unserviceable.

3 = Foreign Object Damage (FOD), unserviceable.

4 = flyaway defective, requires overhaul.

5 = high time engine.

6 = see AFTO Form 95, Significant Historical Data.

7 = 1 and 2 combined, unserviceable.

8 = 1 and 3 combined, unserviceable.

9 = 2 and 3 combined, unserviceable.

NOTE 5: Same as aircraft status codes. Codes are contained in AMARCI 21-131. Enter "TA" when deobligating an engine (Reference Note 3).

NOTE 6: 1 thru 9. If there are more than nine engines continue with alpha numeric, i.e., A=10, B=11, C=12, etc.

NOTE 7: Required for installed or obligated engines.

NOTE 8: Location of aircraft if engine is installed, supply storage location if obligated uninstalled/unobligated. Supply storage locations will be constructed of a 10 digit configuration consisting of "NNANNNANNN" (N=Numeric, A=Alpha). All positions must be filled or a reject will occur (unobligated engines only). The same location should not be used for more than one engine. If an engine that is obligated but not installed, is to be put in storage the first two positions must be blank, i.e., 02G01A01.

NOTE 9: A "1" in position 86 will allow reject override on missing AMARC engine ID number edit.

NOTE 10: To change ownership for uninstalled engines: New owner in position 45 and "C" in position 80. To process concurrent engine reclamation project enter "R" in position 80. Enter a "P" in position 80 to print output document.

NOTE 11: Mandatory entry when deobligating an engine.

Attachment 6

ENGINE STATUS RECORD INDICATIVE DATA CHANGE/LOAD INPUT FORMAT (XID)

This input provides the capability to load or change Engine Status records. Input TRIC (XIS) is also used to process aircraft and work order status records. Internal edits of input data elements will determine type of record to build or change.

ENGINE XID ON-LINE INPUT FORMAT
TYPE ACTION C ONLY

			Remarks
1- 3	TRIC	XID	
4	TYPE ACTION CODE	C	
5- 6	TYPE RECORD CODE	2	
7-14	COMM CODE/COMM OWNER/ ENGINE TYPE ID NBR		
15-19	DATE OF LAST OVERHAUL/BLANK		Navy only
20	NUMBER OF OVERHAULS/BLANK		Navy only
21	SOAP SAMPLE/BLANK		
22	INDICATOR CODES/BLANK		NOTE 1
23-28	ENGINE CYCLE COUNT/BLANK		
29-33	DATE ENGINE REMOVED/BLANK		NOTE 2
34-36	REASON FOR REMOVAL/BLANK		
37-41	PRESERVATION DATE/BLANK		
42-43	NAVY STAR CODE/BLANK		
44-50	LAST REPORT SEQ NBR/BLANK		NOTE 3
51-52	LAST REPORT STATUS CODE/BLANK		NOTE 4
53-58	SHIP TO SRAN/BLANK		NOTE 2
59	FREEZE CODE/BLANK		NOTE 2
60-64	AUTOMATIC RELEASE DATE/BLANK		NOTE 2
65-72	ENG GBOX TYPE-ID NBR/BLANK		
73	ENG GBOX OBLIG INDICATOR/BLANK		
80	PGMR CODES/RESERVED FOR PGMR		

NOTE 1: Enter “P” in position 22 to print output document.

NOTE 2: Enter “*” in first position to blank field.

NOTE 3: a. Air Force Sequence Number positions 44-50, TO 00-25-254-1, Chapter 3.

b. Navy sequence number - see NAVAIRINST 13700.15B.

c. Army and Coast Guard - none.

NOTE 4: a. Air Force and Army use status codes outlined in TO 00-254-1, chapter 6.
b. Navy and Coast Guard use status codes outlined in NAVAIR INST 13700.15B.

Attachment 7

ENGINE STATUS RECORD INDICATIVE DATA LOAD/CHANGES INPUT FORMAT (XIE)

This input provides the capability to load/change indicative data in the Engine Status Record. A trans-action history record is loaded for each transaction.

ENGINE XIE ON-LINE INPUT FORMAT
TYPE ACTION C ONLY

			Remarks
1- 3	TRIC	XIE	
4	TYPE ACTION CODE	C	
5- 6	TYPE RECORD CODE	2	
7-14	COMM CODE/COMM OWNER/ ENGINE TYPE ID NBR		
15-19	TOTAL ENGINE HOURS/BLANK		
20-24	SCHEDULED INDUCTION DATE/BLANK		
25-29	ACTUAL INDUCATION DATE/BLANK		
30-34	ORIG WRK COMP DATE/BLANK		
35-39	COMPLETION DATE/BLANK		
40	ENGINE MUSEUM CODE/BLANK		
41-42	ENGINE FMS NONDAD CODE		
43-44	RESERVED		
45	PROCESS CODE/BLANK		ENTER “P” IF OUTPUT REQUIRED
46-53	ENGINE UNIT COST/BLANK		
54-83	RESERVED		

Attachment 8

ENGINE INVENTORY LISTING, D003AF823

A8.1. PURPOSE. To provide a directory of engines in the current AMARC inventory. It is printed in three sequences: by AMARC ID within type engine; by serial number within MDS; and aircraft engine location sequence. Totals are indicated by service and by each type. Listing may also be obtained by each service.

A8.2. REFERENCE. AMARCI 21-109, para 4.4.

A8.3. REPORTING DATA:

A8.3.1. As of Date: NA.

A8.3.2. Frequency: As required.

A8.4. INPUT DATA. Program Select Card.

Position	Nr Pos	Field Designation	Remarks
1- 6	6	Document ID	RPT F82
7-22	16	Title	Engine Directory
23	1	Blank	
24-28	5	Options	Note 1
29	1	Blank	
30	1	Inventory Parameter	Note 2
31	1	Service/Blank	Note 3
32	1	Blank	
33	1	Serial Nbr Seq Indicator	Note 4
34-80	47	Blank	

NOTE 1: a. Position 24 - Enter "S" for special option.

b. Position 25 - Enter "9" to select unobliated engines. Enter "0" to select obligated installed engines. Enter "1" to select obligated-uninstalled engines.

c. Position 26 - Blank for all services; "A" to select AF engines; "N" to select Navy engines; "H" to select Army engines; and "C" to select Coast Guard engines.

d. Positions 27-28 - Blank for all status. Enter 1st position of AMARC status to be selected. For example, "S" in position 27 and blank in position 28 will select all "S" status, "ST" in positions 27-28 will select all "S" and "T" status.

NOTE 2: Enter dash (-) in position 30 to request inventory listing.

NOTE 3: Enter owning service code (A = Air Force; C = Coast Guard; H = Army; N = Navy), leave blank if for all services.

NOTE 4: a. Leave blank to print listing in owner, type code sequence.

b. Enter "*" to print listing in owner, serial number sequence.

c. Enter "2" to print Part 2 only.

A8.5. DISTRIBUTION: Two copies to the EM; one copy to FSO (Part 2 only).

A8.6. MANAGEMENT USES. Provide the EM an up-to-date listing of all engines in custody of AMARC, showing status of engines and aircraft to which assigned.

Attachment 9

DATA FOR ENGINES INSTALLED ON EXCESS AIRCRAFT (RCS: MTC-MM(AR)7759) (D003AF871)

A9.1. PURPOSE. Provides a listing of engines dedicated to excess aircraft upon assignment to a reclamation project. The listing is by project, aircraft MDS, aircraft serial number, engine TMS, and engine serial num bers. Indicative data provided are the engine position, and hours since last overhaul.

A9.2. REFERENCE. AFMCR 65-31, *Reclamation of USAF Property*, Chapter 2, para 2-3.

A9.3. REPORTING DATA:

A9.3.1. As of Date: NA.

A9.3.2. Frequency: As required.

A9.4. INPUT DATA:

A9.4.1. Program Select Card

Position	Nr Psn	Field Designation	Remarks
1- 3	3	TRIC	RPT
4- 6	3	Report Number	F87
7	1	Blank	
8-17	10	Title	MTC-MM7759
18	1	Blank	
19	1	Number of Times to Print	Note 1
20-22	3	Blank	
23-30	8	WRK-List or Blank	Note 2
31-80	50	Blank	
b. Parameter Cards.			
1- 4	4	Constant	RCLM
5- 6	2	Blank	
7-12	6	Reclamation Project Number	Notes 3 and 4
13-18	6	Reclamation Project Number/Blank	Notes 3 and 4
19-24	6	Reclamation Project Number/Blank	Notes 3 and 4
25-30	6	Reclamation Project Number/Blank	Notes 3 and 4
31-36	6	Reclamation Project Number/Blank	Notes 3 and 4
37-42	6	Reclamation Project Number/Blank	Notes 3 and 4
43-48	6	Reclamation Project Number/Blank	Notes 3 and 4
49-54	6	Reclamation Project Number/	Notes 3 and 4
55-60	6	Reclamation Project Number/Blank	Notes 3 and 4
61-66	6	Reclamation Project Number/Blank	Notes 3 and 4
67-72	6	Reclamation Project Number/Blank	Notes 3 and 4
73-78	6	Reclamation Project Number/Blank	Notes 3 and 4
79	1	* or Blank	Note 4
80	1	Blank	

NOTE 1: Enter "1" thru "9" for number of sets to print. Enter "1" unless more than six copies are required.

NOTE 2: To request a work version of this report, enter "WRK-List" in positions 23-30. This option will list all engines in requested project, including engines previously reported. Engine records are not updated.

NOTE 3: Enter reclamation projects required, such as "RSC099". Up to 12 projects may be entered.

NOTE 4: Enter an "*" immediately following the last project entered to denote end of parameter.

A9.5. DISTRIBUTION:

A9.5.1. Jet Engines. Five copies to the EM for distribution as follows: One copy each to OC-ALC EM, Reclamation Program Control Officer (RPCO); San Antonio-Air Logistics Center (SA-ALC) EM, AMARC EM file; and LAR.

A9.5.2. Reciprocating Engines. Five copies to the EM for distribution as follows: One copy each to SA-ALC EM, RPCO, OC-ALC EM, LAR, and the AMARC EM file.

A9.6. MANAGEMENT USES. This report is used by the respective EMs to satisfy priority requirements prior to routine reclamtion and to develop save list requirements for whole engines or engine parts requirements during routine aircraft reclamation. In addition, the report is used by the NAVAIRSYSCOM or appliable item manager at the Air Logistics Center to ensure adequate shipping devices are available for required engines. The reclamation scheduler in LAR will use the report to ensure engines meeting save list requirements are removed and reclaimed.

Attachment 10

ENGINE STATUS DIRECTORY FORMAT (D003AF821)

FIRST LINE OF PRINT

ENGINE MDS - Engine model, design and series (12 positions).

ENGINE SER NR - Engine serial number (10 positions).

ENG TY/ID - AMARC assigned (8 positions).

AIRCRAFT MDS - Aircraft Mission Design Series (8 positions).

AIRCRAFT SER NR - Aircraft Serial Number (8 positions).

ACFT TY/ID - AMARC assigned type and identification number (8 positions).

REL DATE - Automatic release date (GSA screening (5 positions)).

HOURS S/OH - Hours Since Overhaul (5 positions).

STAR CODE - Star Code (Navy engines only (2 positions)).

NR OH - Number of overhauls (Navy (1 position)).

TOTAL HOURS - Total Engine Hours (Navy (5 positions)).

DATE RECD - Date received (5 positions).

DATE REMV -Date removed (5 positions).

REA REM - Reason for removal (3 positions).

DATE PRES - Date of last preservation (5 positions).

DEP DATE - Departure date (5 positions).

MS CD - AMARC status code (same as aircraft for all installed engines (2 positions)).

PR MS - Previous AMARC Status Code (2 positions).

ENG DOLT - Date of last transaction (Engine Rcd (5 positions)).

D R - Dead Record Code (assigned when engine departs AMARC (1 position)).

SECOND LINE OF PRINT

CURRENT PROJ NR - Current project number (same as aircraft for installed/obligated engine – 8 positions available). Unobligated engines: Air Force engines - LOG7E999, Navy engines - NSX20000, Army engines - AWE999, Coast Guard - CWE999.

PROJ DATE - Project Begin Date (5 positions).

PREVIOUS PROJ NR - Previous Project number (8 positions).

C O - Current Owner (A-Air Force; C-Coast Guard; H-Army; N-Navy (1 position)).

P O - Previous Owner (1 position).

C C - Current Customer (storage acft engines - A, C, H, N, Reclamation/RIT Acft Engines) (disposal customer codes B, D, J. P (1 position)).

P C - Previous Customer (1 position).

CE ST - Current engine status (2 positions).

PE ST - Previous engine status (2 positions).

ST FL - Status Flag (2 positions).

DATE OH - Date of last overhaul (Navy (5 positions)).

GP 1 IND - Group 1 Removal Listing Indicator (1 position).

ENG LOC - Engine location (same as aircraft for installed engines (10 positions)).

SH-TO DESIG - Ship to SRAN (6 positions).

LAST SEQ - Current reporting sequence number (Air Force (7 positions)).

P I - Engine position number (1 position).

F C - Freeze code (2-GSA screening; 3 Administrative; 4-Pending transfer to DRMO (1 position)).

I T - Inter-service Transfer (1 position).

S S - SOAP sample (1 position).

C I - 7147 Report Indicator (1 position).

A S - 7148 Report Indicator (1 position).

RT I - RIT Status Indicator (1 positions).

C S - F59 Control (1 position).

R I - Backtrack Reclamation Indicator (1 position).

S ID DATE - Scheduled Induction Date (5 positions).

A ID DATE - Actual Induction Date (5 positions).

OWC DATE - Original Work Completion Date (5 positions).

COMP DATE - Actual Completion Date (5 positions).

ACFT DOLT - Aircraft Date of Last Transaction (5 positions).

D R - Dead Record Code (assigned when aircraft departs AMARC (1 position)).

Attachment 11

ENGINE STATUS RECORDS FORMAT (D003AF82)

A11.1. PURPOSE . Provides the capability to load, change, and delete all engine status records. Provides AMARC with current engine status, inventory control, location, and data for other AMARC unique program input validation edits.

A11.2. ESTABLISHMENT AND CONTROL . Records are established and maintained by creation and input of TRICs XIS, XID and XIE. Edits all inputs for accuracy and compatibility. Establishes internal linkage from AMARC-type record to engine status, and aircraft status record.

A11.3. FILE MAINTENANCE AND AUDIT . Transaction histories will be generated by activity against this file. TTPC codes 6A, 6B, and 6C apply. A file cleanup program will be processed when necessary. Dead records will be dropped from the file concurrently with the file cleanup.

ENGINE STATUS RECORD

SECTOR POSITIONS	POS NR	CONTENTS
001-002	2	Type Record Code
003-010	8	AMARC Type-ID Number
011-022	12	Type/Model/Series
023-032	10	Serial Number
033	1	Current Owner
034	1	Current Customer
035-042	8	Current Project
043-044	2	Current AMARC Status
045	1	Previous Owner
046	1	Previous Customer
047-054	8	Previous Project
055-056	2	Previous AMARC Status
057-058	2	Blank
059-068	10	Location
069-073	5	Date of Receipt/Arrival Date
074-078	5	Departure Date
079-083	5	Last Preservation Date
084-088	5	Project Begin Date
089-090	2	Status Flag
091-092	2	Star Code
093	1	SOAP Sample Code
094-098	5	Scheduled Induction Date

099-103	5	Actual Induction Date
104-108	5	Original Work Completion Date
109-113	5	Completion Date
114-118	5	Removal Date
119-121	3	Reason for Removal
122-126	5	Last Overhaul Date
127-131	5	Number of Hours Since Overhaul
132-136	5	Total Engine Hours
137-142	6	Cycle Count
143-150	8	Aircraft AMARC Type-ID Obligated To
151-157	7	Last Report Sequence Number
158-159	2	Current Report Status Code
160-161	2	Previous Report Status Code
162	1	Gear Box Indicator
163-170	8	Gear Box AMARC Type-ID
171-176	6	Ship To SRAN
177	1	Number of Overhauls
178-179	2	FMS NONDAD Code
180-191	12	Blank
192	1	Eng Position - Losing Aircraft
193-200	8	Aircraft Type-ID Nr. - Losing Aircraft
201	1	Interservice Transfer Indicator
202	1	Museum Code
203	1	Freeze Code
204-208	5	Automatic Release Date
209	1	Engine Position
210	1	DPDA Transfer Indicator
211	1	RCS 7759 Indicator
212	1	RCS 7147 Indicator
213	1	RIT Indicator
214	1	Re-Reclamation Indicator
215	1	F49 Run Indicator
216	1	Group 1 Revision Indicator
217	1	F59 Run Indicator
218	1	F60 Run Indicator
219-223	5	Status Change Date (DMBA)
224-231	8	Unit Cost
232-250	19	Blank

251	1	Industrial Fund Customer
252	1	Industrial Fund Manager
253-311	59	Blank
312-316	5	Date of Last Transaction
317	1	Dead Record Code
318	1	Delete Code
319-320	2	Record Lock Code

Attachment 12

ENGINE ACTIVITY REPORT (D003AP14)

A12.1. PURPOSE. To provide a monthly listing of engine arrivals and departures. Listing is broken down by engine type (TMS) and the dollar value of each engine and engine TMS.

A12.2. REFERENCE. AMARCI 21-109, para 4.6.

A12.3. REPORTING DATA:

A12.3.1. As of Date: NA.

A12.3.2. Frequency: Monthly.

A12.4. INPUT DATA. Program Select Card.

Nr Position	Psn	Field Designation	Remarks
1-3	3	TRIC	RPT
4-6	3	Report Number	P14
7-80	74	Blank	

A12.5. DISTRIBUTION: Forward one copy to the EM.

Attachment 13

DATA FOR EXCESS ENGINES ON AIRCRAFT FOR ALL SERVICES (D003AP251)

A13.1. PURPOSE. Provides a listing of engines dedicated to excess aircraft upon assignment to a reclamation project. The listing is by project, aircraft MDS, aircraft serial number, engine TMS, and engine serial numbers. Indicative data provided are the engine position, AMARC status flag, and hours since last overhaul.

A13.2. REFERENCE. AMARC 21-109, Engine Status System, paragraph 4.3.1.

A13.3. REPORTING DATA:

A13.3.1. As of Date: NA.

A13.3.2. Frequency: As required.

A13.4. INPUT DATA:

ENGINE XIS ON-LINE INPUT FORMAT
TYPE ACTION C ONLY

			Remarks
1- 3	TRIC	XIS	
4	TYPE ACTION CODE	C	
5- 6	TYPE RECORD CODE	2	
7-14	COMM CODE/COMM OWNER/ ENGINE TYPE ID NBR		NOTE 1
15-26	TYPE/MODEL/SERIES OR BLANK		
27-36	ENGINE SERIAL NBR/BLANK		
37-44	PROJECT NBR/BLANK		
45	OWNERSHIP CODE/BLANK		
46-47	ENGINE STATUS FLAG/BLANK		NOTE 2
48-49	AMARC STATUS CODE/BLANK		
50	ENGINE POSITION (ON ACFT)/BLANK		
51-58	AIRCRAFT TYPE-ID NBR/BLANK		
59-63	RECEIPT/ARRIVAL DATE/BLANK		
64-68	HOURS SINCE LAST OVERHAUL/BLANK		
69	CUSTOMER CODE/BLANK		
70-79	ENGINE LOCATION/BLANK		
80	INDICATOR CODES/BLANK		
81-85	DEPARTURE DATE/BLANK		

86 LOAD SEQ NBR OVERRIDE/BLANK

NOTE 1: Enter the AMARC Engine ID number assigned to the engine in positions 714.

NOTE 2: Enter Code 08 in positions 4647 after the engine has been processed in CEMS to drop Accountability.